

Health Consultation

BAYOU BONFOUCA

ASSESSMENT OF CANCER INCIDENCE FROM THE LOUISIANA
TUMOR REGISTRY FROM 1988 - 1997

SLIDELL, ST. TAMMANY PARISH, LOUISIANA

EPA FACILITY ID: LAD980745632

MARCH 17, 2005

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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Prepared by:

**Louisiana Department of Health and Hospitals
Office of Public Health
Section of Environmental Epidemiology & Toxicology
Under Cooperative Agreement with the
U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry**

I. EXECUTIVE SUMMARY

In 1994, the Louisiana Department of Health and Hospitals, Office of Public Health, Section of Environmental Epidemiology and Toxicology (LDHH/OPH/SEET) prepared a public health assessment for the Bayou Bonfouca site. It was determined that the Bayou Bonfouca site, an abandoned creosote wood treating facility, posed a public health hazard because of past, and possibly present and future exposure to on-site soil, sediment, and surface water contaminated with polycyclic aromatic hydrocarbons (PAHs), pentachlorophenol (PCP), and dioxin. The exposures were estimated to be at levels that could exceed, individually or as a mixture, long-term guidelines (1). This health consultation is in response to community concerns and was developed in cooperation with the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct a health statistics review to evaluate cancer statistics. A health statistics review was conducted by the LDHH/OPH/SEET in order to evaluate whether the population residing closest to the Bayou Bonfouca National Priorities List (NPL) site in St. Tammany Parish, Louisiana, had elevated cancer incidence rates. The review consisted of four census tracts and ten census block groups within one mile of the site. The size of the population in the 1-mile proximity zone was approximately 21,834 persons. A 1-mile proximity was chosen because of the limited data available, the presence of contaminated fishing areas (which are posted), and the presence of contaminated properties (recreational and residential). Incidence cancer data from the years 1988-1997 as reported in the Louisiana Tumor Registry (LTR), a population based cancer incidence registry for the state, were utilized for this review. The cancer cases included in analysis were those cases that could be geocoded to latitude and longitude coordinates within the two census tracts within 1-mile of the site. The geocoding rate for the entire data set was 92.7%.

The purpose of this health statistics review was to compare incidence rates (1988 - 1997) in the population located within 1-mile proximity zone of the Bayou Bonfouca site to those of the state of Louisiana. Cancer incidence for all cancers combined and for cancers at specific body sites associated with chemical exposure were reviewed. The specific cancer sites analyzed in this review are breast (females), colorectal, lung and bronchus, non-Hodgkin's lymphoma, ovarian (females) and prostate (males).

Results of the cancer incidence review for the census tracts and census block groups composing the 1-mile proximity zone compared to Louisiana state incidence cancer rates showed males who lived in the 1-mile proximity zone had significantly lower incidence ratios for all cancers combined, for colorectal cancer and for prostate cancer. Females who lived in the 1-mile proximity zone had significantly lower incidence ratios for all cancer combined and for breast cancer. In reviewing the cancer statistics, no association between residence within the census tracts and census block groups within 1-mile of the site and cancer incidence emerges.

